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ABSTRACT

Presented in this report are a program description and the results of evaluation of the Basic Bilingual Program implemented at John Bowne High School in New York City during 1980-81. The program provided instruction in English as a Second Language, instruction in Spanish language skills, and bilingual instruction to high school students of limited English proficiency. The report describes the project context and student characteristics, and discusses the program philosophy, organizational structure, student placement, instructional program, funding and personnel, staff development, curriculum development, supportive services, and parent/community involvement. Patterns of student attendance, student behavior, plans for further education, and participation in extracurricular activities are examined as indicators of students' attitudes toward the program. Results of evaluation of student achievement in English, Spanish, mathematics, social studies, science, and business education are provided. Evaluation suggests that the program was generally effective, and the report identifies factors responsible for program success. Recommendations to ensure program continuity after the termination of Title VII funding are presented. (MJL)

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FINAL EVALUATION REPORT

E.S.E.A. TITLE VII

Grant Number: G007604867

Project Number: 5001-56-17615

JOHN BOWNE HIGH SCHOOL

BASIC BILINGUAL PROGRAM

1980-1981

Principal: Ms. Pearl Warner

Director: Mr. Louis Cohen

U.S. DEPARTMENT OF EDUCATION
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A SUMMARY OF THE EVALUATION
FOR THE
BASIC BILINGUAL PROGRAM
JOHN BOWNE HIGH SCHOOL
1980-1981

This program, in its fifth and final year of funding, provided instruction in E.S.L. and Spanish language skills, as well as bilingual instruction in science, mathematics, social studies, and business education to approximately 240 students of limited English proficiency in grades nine through twelve. The target population represented 15 national backgrounds and varied in educational preparedness, socioeconomic status, and length of residency in the United States.

As the aim of the program was to reinforce native language ability while allowing the student to acquire the English language skills necessary for full mainstreaming, the first two years of a student's curriculum centered around content-area courses taught in the native language, the development of Spanish language skills, and English instruction in E.S.L. classes. In the third and fourth years, the emphasis shifted to the full use of English as a language of instruction. Students could choose between academic and career concentrations. Total mainstreaming was possible after the second year in the program upon an evaluation of LAB scores, English and Spanish reading scores, scholastic achievement and attendance. Parental consent was also sought.

Title VII funds supported administrative services to students and two paraprofessionals. All support services were provided by tax levy personnel, or by outside agencies such as Aspira or Queensborough Community College. Development activities for staff members included enrollment in college courses in bilingual education, regular in-service training meetings and workshops, model classes taught by the project director, and informal "teacher stress assistance" sessions. Parents of participating students were involved through a Parent Advisory Committee, participation in program and school-wide activities, and telephone contacts.

Students were assessed in English language development (Criterion Referenced English Syntax Test); growth in their mastery of Spanish (Interamerican Series Prueba de Lectura); mathematics, social studies, science, and business education (teacher-made tests); and attendance (school and program records). Quantitative analysis of student achievement indicated that:

--Program students met the criterion level of one objective mastered for each month of instruction in E.S.L.

--In Spanish reading, tenth, eleventh, and twelfth graders made statistically significant growth which was also judged to be educationally significant. Ninth graders were apparently given a level of the test which was too easy, resulting in very high scores at pre-test and, as a result, little improvement at post-test.

--In mathematics, eleventh and twelfth grade students met the criterion for mastery (that 65 percent or more of the students would pass teacher-made examinations in mathematics). Ninth and tenth graders met the criterion in one of the two terms reported.

--In science, tenth, eleventh, and twelfth graders surpassed the 65 percent criterion level, while ninth graders achieved passing rates of 64 and 62 percent.

--In social studies, the criterion level was met and substantially surpassed in grades ten, eleven, and twelve. The ninth graders did not achieve the objective in the fall term but succeeded in the spring.

--In the areas of native language studies and business education, students in all grades surpassed the criterion for mastery.

--The attendance rate of program students was significantly greater than that of the entire student body, suggesting a high level of student motivation.

The success of the bilingual program was attributed to: the imaginative use of available resources; the well-developed curricular strategies and materials; the successful use of career and vocational themes across all areas of program activity; the mutually productive relationship with the Bowne guidance staff; and special sensitivity and competence in supportive services.

The following recommendations were aimed at providing continuity for the present program population after the termination of Title VII funding:

--The recognition and continued utilization of the program staff as a resource in providing future services;

--Follow-up study of program students to monitor their progress;

--Incorporation of the present bilingual resource library into the school library;

--Designation of a bilingual family liaison to attend to the special needs of program parents and students.

TABLE OF CONTENTS

		PAGE
I.	Demographic and Physical Context	1
II.	Student Characteristics	3
III.	Program Description	13
IV.	Instructional Component	17
V.	Non-Instructional Component	25
	Curriculum Development	25
	Supportive Services	26
	Staff Development	29
	Parental and Community Involvement	30
	Affective Domain	32
VI.	Findings	34
VII.	Conclusions and Recommendations	48

LIST OF CHARTS AND TABLES

			PAGE
Chart	1.	Bilingual program organization.	15
Table	1.	Home language of foreign-born students in the school as a whole.	5
Table	2.	Ethnic composition of bilingual program student body.	8
Table	3.	Number and percentages of students by sex and grade.	10
Table	4.	Number of students by age and grade.	12
Table	5.	Funding of the instructional component.	19
Table	6.	Instruction in English as a second language.	19
Table	7.	Instruction in native language skills.	20
Table	8.	Bilingual content-area instruction.	20
Table	9.	Mainstream academic classes in which program students participate.	21
Table	10.	Number of students leaving the program.	24
Table	11.	Funding of the non-instructional component.	25
Table	12.	Title VII staff characteristics.	30
Table	13.	Results of the Criterion Referenced English Syntax Test (E.S.L. Non-Title I students, total year).	38
Table	14.	Performance of students on the Criterion Referenced English Syntax Test (E.S.L. Non-Title I students, total year).	39
Table	15.	Performance of students tested on more than one test level of the Criterion Referenced English Syntax Test.	40
Table	16.	Native language reading achievement for Spanish-speaking students.	41
Table	17.	Number and percent of students passing teacher-made examinations in mathematics.	42
Table	18.	Number and percent of students passing teacher-made examinations in science.	43

LIST OF CHARTS AND TABLES
(continued)

		PAGE
Table 19.	Number and percent of students passing teacher-made examinations in social studies.	44
Table 20.	Number and percent of students passing teacher-made examinations in native language studies.	45
Table 21.	Number and percent of students passing teacher-made examinations in business education.	46
Table 22.	Significance of the difference between attendance percentages of program students and the attendance percentage of the school.	47

BASIC BILINGUAL PROGRAM - JOHN BOWNE HIGH SCHOOL

Location:	63-21 Main Street, Flushing, New York
Year of Operation:	1980-81, Fifth and Final Year of Funding
Target Language:	Spanish
Number of Students:	247
Principal:	Ms. Pearl Warner
Program Director:	Mr. Louis Cohen

I. DEMOGRAPHIC AND PHYSICAL CONTEXT

John Bowne High School is located in an area of Flushing, Queens which was designed as an educational park. There is open space surrounding the school, views of greenery from the windows, and a suburban-like atmosphere. This is enhanced by the excellent condition of the school itself, which was opened in 1964, and has been carefully maintained. The Basic Bilingual Program at Bowne is housed in two rooms entered through the offices of the assistant principal for guidance, on the main floor of the school building. This central location is an asset to the program staff, although they are somewhat crowded in the space provided.

Queens College, Junior High School 218, and an elementary school are all located in the same immediate neighborhood as Bowne, in a mainly residential community with modest, well-kept, two-family homes. Directly across from the school is a cemetery, and the busy commercial area of Main Street, Flushing is a short bus ride away. To the west is the Cross Island Parkway. To the south is an Orthodox Jewish community whose children attend parochial schools. To the north, an ethnically mixed, middle class neighborhood, originally mainly Italian,

now has increasing numbers of Oriental and Hispanic residents. Many of the children from this community also go to parochial schools, although some attend Bowne.

Most of the school's students, however, come from outside this immediate surrounding area. Corona and Elmhurst send Chinese, Hispanic, and Korean students to the school. Haitian and Hispanic students come from Jamaica. Greater Flushing, a very transient area with many multiple dwellings, some housing two or three families per apartment, sends Oriental students, Greeks, Indians, Pakistanis, and others. This year, many students have come to the area as political refugees, from Afghanistan, Iran, El Salvador, and Russia, for example. Because this area of Queens is so diverse ethnically, English remains the language of communication in the community, while the use of the native language is usually confined to home and family related settings.

In general, the attendance area of the school is rapidly changing. Even the immediate neighborhood, which had been a highly stable neighborhood of long-time residents, has been affected by the pattern of immigration. The basic population of the entire area continues to be middle class or lower middle class, but there are increasing numbers of lower-income families. About 20 percent of the total school population fall into this latter category, but among Basic Bilingual Program students, an estimated 90 percent are eligible for the free lunch program. The lower-income families tend to be single-parent families, or surrogate-parent families with both parents employed. In some cases, parents have sacrificed good jobs to bring their families to the United States. For example, the father of one Bowne student was a white-collar worker in Colombia, and now has a job in a factory.

Housing in the area has not deteriorated, but is overcrowded. Many immigrant families have large numbers of children, yet they must move into small apartments because landlords have found they can maximize their profits by dividing larger rental units into small ones. In addition, rents are very high in this area, so that often, as has been mentioned, more than one family must share a single housing unit. The immigrant families also tend to be among the most transient in the local population. This is equally true of the Hispanics among them, although the total number of Hispanics in the locality tends to be stable.

Unemployment is a problem in the community. Many of the immigrant families are on welfare; others find themselves forced to take the worst jobs, often at substandard rates of pay. Financial problems and other stresses are compounded by the fact that this is a two-or-three fare area. Transportation is not convenient, and long trips, often involving two separate subway lines plus a bus ride, must be made to get to work, school, and so on. Yet despite all these pressures, and the presence of large numbers of under-employed young people, this is not a high crime area. Neither is substance abuse currently a major problem in the community. At Browne a SPARKS program has been effective in dealing with drug users.

II. STUDENT CHARACTERISTICS

All of the problems present in the community affect program students, who often make long trips to school, and may return home to do homework in a small apartment crowded with younger siblings, and other family and non-family occupants. Some also have to work after school

to supplement an inadequate family income. Health problems vary within the community, but in general are not a major factor. Occasionally, program students are absent from school because they have to care for a younger sibling who is ill, or because of parental illness. This, however, is as much related to economic constraints and cultural definitions of responsibility as it is to health problems as such. And in general the program's students demonstrate excellent attendance rates, with a dropout rate estimated by the project coordinator to be as low as 7.5 percent. This latter statistic is in part the result of a major effort this year to identify students at high risk of dropping out, and to direct them to an appropriate alternative setting.

The ethnic composition of the school's neighborhood is, as has been indicated, unusually diverse, so much so that John Bowne High School has been referred to as New York's second United Nations. Over 40 percent of the school's student population of 3,400 are foreign born. A census taken in the English as a second language (E.S.L.) classes identified students coming from forty-five countries, going from "A to Z":

Afghanistan	Gambia	Lebanon
Argentina	Greece	Mexico
Brazil	Guatamala	Pakistan
Chile	Guyana	Panama
China	Haiti	Peru
Colombia	Honduras	Philippines
Costa Rica	Hong Kong	Poland
Cuba	India	Puerto Rico
Czechoslovakia	Iran	Somalia
Cyprus	Israel	Turkey
Dominican Republic	Italy	Uruguay
Ecuador	Jamaica	U.S.A.
Egypt	Kerala	U.S.S.R.
El Salvador	Korea	Vietnam
Ethiopia	Laos	Zaire

Home languages of students in school as a whole, excluding English and Spanish, are shown in Table 1, below. Limited English proficiency (LEP) percentages are shown within each language group. It is also of note, however, that approximately two-thirds of the total LEP population at Bowne is Hispanic.

Table 1. Home language of foreign-born students in the school as a whole.

LANGUAGE	NUMBER OF STUDENTS	PERCENT TOTAL ENROLLMENT	PERCENT LEP FOR THIS LANGUAGE
Chinese	106	3.5	11
Hindi	75	2.5	33
Korean	55	1.8	60
Italian	31	1.0	16
Greek	20	.6	10
Vietnamese	18	.5	78
Urdu	15	.4	53
Pashto	12	.3	100
Russian	11	.3	82
English (Guyana)	11	.3	55
French	10	.3	50
French-Creole	10	.3	0
Arabic	6	.1	50
Persian	6	.1	17
Turkish	6	.1	50

Table 1. (continued)

LANGUAGE	NUMBER OF STUDENTS	PERCENT TOTAL ENROLLMENT	PERCENT LEP FOR THIS LANGUAGE
Burmese	5	.1	100
Hebrew	4	.1	75
Tagalog	4	.1	50
Hungarian	3	.09	50
Polish	3	.09	33
Rumanian	2	.06	0
Ugandan	2	.06	0
Amharic	1	.003	0
Czech	1	.003	100
Danish	1	.003	0
Dutch	1	.003	0
Ambian	1	.003	100
German	1	.003	0

The principal of the school would like to put this diversity to work academically by making Bowne an international school, authorized to grant the international baccalaureate, and with a focus on foreign languages, global studies, and international careers. She supports the present bilingual program, while regretting that it has been able to serve only the Hispanic children of the school community. She would like to see, for example, a class where Chinese and English native speakers could teach one another their respective languages. For her, bilingualism is a priority for English native speakers as well as foreign-born students.

The project's student population was 247 during the spring of 1981, or 30 percent of the total Hispanic population of the school. The project population can be broken down as shown in Table 2, below. Students come from fifteen different countries, with Dominicans and Colombians accounting for 58.3 percent of the total, Ecuadorians another 13.4 percent, and Puerto Ricans, the fourth largest group, 8.1 percent. Thus, unlike students in some other New York City bilingual programs, these are not mainly Puerto Ricans.

A school publication called "Cuentos de mi Pueblo," or "Stories of my Town," communicates this diversity. Each story included was recounted to a student by a family member, and reflects the local culture and folkloric traditions of a different country. In a recent newspaper article about Bowne (Daily News, December 14, 1980), the assistant principal for guidance was quoted as follows: "These are charming tales that have been orally passed down through the generations and give students a strong feeling of their origins. Just because the children are in America doesn't mean we want them to forget their backgrounds."

Country of origin is only one way in which the Basic Bilingual Program students vary. While all are the children of immigrant families, some have lived in the United States for one, two, or more years, while others are new arrivals. Some have come from a rural way of life, while others have grown up in cities. The educational level and socio-economic status of the families also vary. Some are solidly middle class, while most, the project co-ordinator stated, rely on some form of public assistance. In addition, some children live in intact nuclear families

Table 2. Ethnic composition of bilingual program student body.

COUNTRY	NUMBER OF STUDENTS	PERCENT OF POPULATION
Colombia	73	23.1
Dominican Republic	113	35.7
El Salvador	17	5.4
Panama	1	.3
Ecuador	38	12.0
Argentina	4	1.2
Puerto Rico	25	7.9
Cuba	6	2.0
Costa Rica	3	1.0
Mexico	1	.3
Guatemala	18	5.8
Peru	9	2.9
Chile	3	1.0
Uruguay	3	1.0
Honduras	2	.7
TOTAL	316	100.3

while others do not; perhaps a child is adjusting to a new family configuration and a new culture at the same time. And of course, the students vary in their own abilities and strengths.

The education which students received in their native countries is another dimension along which there is considerable variation. The

students range from near illiteracy to high degrees of competence in their native language, Spanish. Reading proficiency in Spanish, for example, as tested by La Prueba de Lectura, varies from a low which would demonstrate virtually no literacy skills, to the high end of the scale where many students are reading above grade level. All students in the program, however, tested above the 20th percentile on the Spanish version of the Language Assessment Battery (LAB).

English proficiency also varies widely among program students. Although most students enter the program at lower levels of proficiency, the range is from E.S.L. 1 or 2 to E.S.L. 7 and 8, with the more proficient students in business English, and other transitional or "vestibule" classes.

Because of the strength and reputation of the bilingual program at Bowne, about 10 to 15 percent of the students travel here from outside the attendance area. In some cases there are the required twenty students for a bilingual program in these students' own area, yet no program exists. In other cases, families attempt to circumvent regulations so that their children can participate in the program. The evaluator witnessed one parent's attempt to enroll her daughter, who lived outside the attendance area, at Bowne, and the co-ordinator's patient and helpful attitude, despite the necessity to direct the student to another program.

Because there may be selective personal and environmental pressures on students in urban communities, the composition of the student body may vary from school to school and grade to grade within a school. In many high schools, girls outnumber boys, as they do at John Bowne (54.2 percent to 45.8 percent overall). This disparity may be due to a number of factors which affect boys and girls differentially, including difficulties of travel to and from school, peer and parental pressures to leave school for employment or marriage.

Table 3 presents the distribution of bilingual students by grade and sex. The figures indicate that boys outnumber girls in the ninth grade. In grades ten, eleven, and twelve, however, girls outnumber boys in a pattern which generally increases from grade ten to twelve, suggesting that more boys leave the program and/or school than girls do. In grade nine, boys comprise 55.5 percent of the population, and girls comprise 44.5 percent. By grade twelve, girls constitute over 64 percent of the students served.

Table 3. Number and percentages of students by sex and grade.

	SEX					
GRADE	MALE f	percent of grade	FEMALE f	percent of grade	TOTAL f	column total: percent of all students
9	35	55.5	28	44.5	63	22%
10	46	44.7	57	55.3	103	36%
11	31	46.2	36	53.8	67	23%
12	19	35.9	34	64.1	53	19%
TOTAL	131	45.8	155	54.2	286	100%

In an attempt to better understand the factors underlying the movement of students through and out of the program, data were collected on the reasons given for students leaving the program during the 1980-81 school year (see Table 10). An analysis of these data by grade and sex provided inconclusive results as to the possible reasons for the differential representations of boys and girls in the program. Contributing to the lack of conclusive results is the number of students for whom information was partially missing (35 students out of the 78 who were reported to have left the program in 1980-81). Also not represented in the data were those students who left the program (or the school) during the summer of 1980, for whom data sheets were not filled out. These may include students who were mainstreamed, who transferred, or who did not return to school for a variety of other reasons. Whatever their reasons for leaving, they do not appear in the records of 1980-81. In sum, there is presently insufficient information provided to determine the reasons for the apparently different rates at which boys and girls leave the bilingual program.

Because so many of the John Bowne bilingual students are immigrants, (many having arrived less than a year ago), their educational histories may vary considerably, as the discussion of student characteristics has indicated. Many have suffered interrupted schooling, or, because of a lack of educational opportunities in their countries of origin, have received fewer years of education than their grade level would indicate. Bilingual program students are reported by age and grade in Table 4.

Table 4. Number of students by age and grade.*

AGE	GRADE 9	GRADE 10	GRADE 11	GRADE 12	TOTAL
14	3				3
15	20	1	1		22
16	24	32	1	1	58
17	10	34	26	3	73
18	4	25	22	20	71
19	2	7	10	15	34
20		2	4	10	16
21				2	2
TOTAL	63	101	64	51	279
Percent over age for their grade:	63.5%	67.3%	56.3%	52.9%	

*Shaded boxes indicate the expected age range for each grade.

According to Table 4, based on program records of student birthdates, 64.9 percent of the program students are overage for their grade. The proportion of overage students ranges from 53 percent in grade twelve to 67 percent in grade ten. The fact that so many students are overage may have implications for interpreting student outcomes and setting standards for expected rates of growth. These are students who have missed a year or more of school, whose grade placement may reflect their age more than their prior educational preparation. As a result they may have a lack of cognitive development in their native language which must be addressed, as it has implications for their ability to acquire oral and literacy skills in English.

III. PROGRAM DESCRIPTION

The Basic Bilingual Program's philosophy of bilingual education is a rich one. It has grown to include an increasingly broad understanding of the educational process during the five years of program operation, while not deviating from the original academic objectives of keeping the students on track, reinforcing existing native language skills, yet allowing the student to acquire the English-language skills necessary for full mainstreaming. Thus the emphasis in the earlier years of program operation was mainly on curriculum development; this year there is a clear human developmental thrust. When asked to comment on the program's underlying philosophy, the assistant principal for guidance stressed the importance of achieving "balance between learning English and reinforcing the student's own language, so that you are really producing bilingual kids, as a positive value in itself, not just so as to keep them from falling behind academically."

An interesting strategy which has evolved to implement this philosophy is the differentiation between the first two years of the high school bilingual curriculum, and the last two. In grades 9 and 10, the student is taught content entirely through the native language, Spanish language skills are developed, and English is mainly taught through the E.S.L. classes, although English vocabulary and language skills are introduced to some extent in content-area courses. In the latter two years, the emphasis shifts to moving towards full use of English as an instructional language, and the student attends more classes which are taught bilingually, using English to the extent possible consistent with understanding the content being communicated.

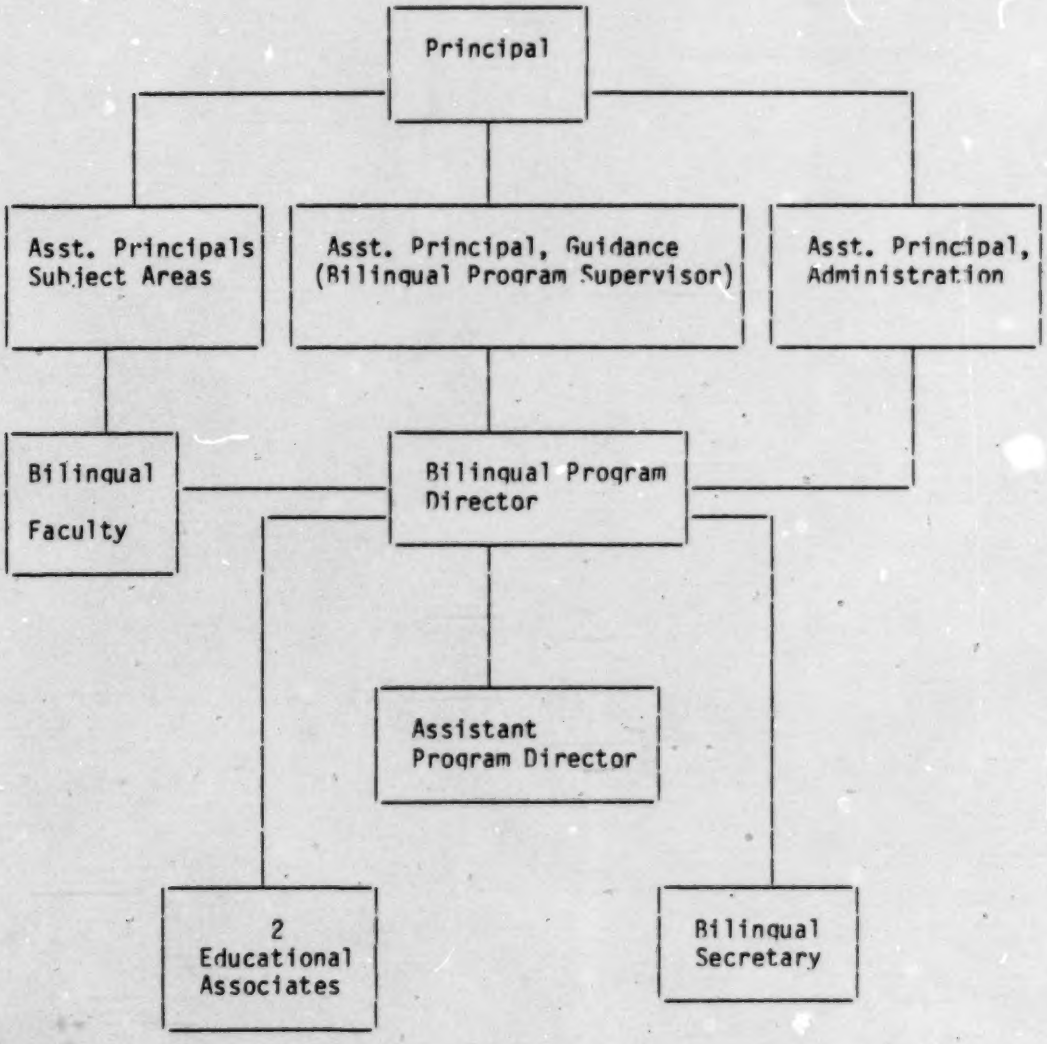
At its inception, the program was organized under the assistant principal for foreign languages. Two years ago, this organizational structure was changed, and at present the program does not enjoy the full support of the foreign language department staff. However, the program's objectives are very well supported by its present organization within the administrative structure of John Bowne High School -- an asset which has enhanced its effective functioning.

As shown in Chart 1, below, the project director is responsible to the assistant principal for administration in the management sphere, but to the assistant principal for guidance in all other areas. The excellent working relationship between the project director and the guidance staff has in fact helped to compensate for the lack of a bilingual guidance counselor within the project itself. The assistant principal has a strong interest in the bilingual program, dating from his involvement in writing the original proposal. In turn, the project director's own strong personal interest and competencies in the guidance area have enabled him to greatly strengthen the supportive services component of the project this year, despite the lack of project personnel specifically assigned to this function.

The bilingual teachers themselves are all responsible to their respective content-area departments, and the bilingual classrooms are not grouped in one special area, but dispersed throughout the school building. The program office functions as a central clearinghouse, resource room, and meeting place which helps the teachers to coordinate their efforts and weave a consistency of bilingual education between the several academic departments and the E.S.L. program. Thus a consistency

of themes is achieved, with emphasis on basic skills in the earlier years, and on career concepts for the older students. Throughout there is a focus on the individual student and the particularity of his or her needs. Also, the program office functions equally as a student clearinghouse, providing a place where day-to-day situations may be resolved with a minimum of red tape.

Chart I. Bilingual program organization.



The LEP students not served by the program are those whose home languages were shown in Table 2, above. These students, speaking a total of 29 different languages, represent approximately one-third of the entire LEP population at Bowne. They are served by the E.S.L. program in classes for the "foreign-born." Program students attend these same classes. They are not segregated in separate E.S.L. classes, and thus participate in the full ethnic diversity of the school community from the time they enter the program.

IV. INSTRUCTIONAL COMPONENT

The student placement and programming process begins when a student is determined to be eligible for participation in the Bowne bilingual program, based on performance below the 21st percentile on the Language Assessment Battery (LAB) together with a higher score on the Spanish version of the Language Assessment Battery. The student is normally recommended to the project by the bilingual guidance counselor (who is not a member of the program team), or a grade advisor. Or, the student may enter at a parent's request, in some cases even with LAB scores above the 20th percentile. Parental approval is always a requirement for participation.

The LAB scores also serve as a major guide to the development of the student's academic program. Other criteria are incoming records, reading and math scores, and personal interviews with the project director and/or the assistant director. (In some cases, especially with children who are political refugees, academic records may not be available.) For students who are already within the bilingual program, the LAB is administered each spring and course selection is also based on their overall academic performance, including P.C.T. and R.C.T. scores. Thus the process is individualized and personal, although the resultant programs are fairly uniform, especially in the 9th and 10th grades, with most variation occurring according to track chosen (career education or academic), E.S.L. level, and mathematics level.

Participants in the program receive instruction in E.S.L., Spanish, science, social studies, and mathematics. As has been stated in the program overview section, above, the first two years of the curriculum are structured around courses taught in the Spanish language,

and stress reinforcement and upgrading of the student's native language skills, while providing English language instruction in E.S.L. classes. At the end of 10th grade, the student may choose a career education track, taking bilingual business English, stenography, typing, and business mathematics. Or, the regular academic curriculum can be continued for grade 11 and 12. In both cases, the student's goal is to move toward full English language instruction in all content areas. However, while increasing amounts of more difficult English vocabulary and English language reading and exercise materials are introduced, instruction itself continues to be primarily in Spanish, except in the secretarial studies classes, where 50 percent Spanish and 50 percent English is used. Students also participate in special education classes, art, music, hygiene, and other special subjects, which are taken with the mainstream students. They may also take other mainstream courses as their interest and English-language and content-area skills permit. While it is mainly juniors and seniors who take advantage of this option, 9th and 10th graders too can attend mainstream classes with appropriate E.S.L. level placement and teacher or grade advisor recommendation. For example, biology for foreign students is one class which may be chosen if parents wish an English-language class for their child.

Tables 5 - 9 which follow show the sources of funding for the instructional staff of the program components, and the bilingual and mainstream courses in which the program's students participated this year.

Table 5. Funding of the instructional component.

	FUNDING SOURCE(S)	NUMBER OF PERSONNEL: TEACHERS	PARAS
E.S.L.	Tax Levy	6	
Reading (English)	P.S.E.N.	1	
	Tax Levy	2	
Native Language	Title VII	.2	
	Title VII		1
Math	Lang. Hndcp.	1	
	Lang. Hndcp.	1	
Social Studies	Title VII	.2	
	Title VII		1
Secretarial	Tax Levy	1	
Studies	Lang. Hndcp.	1	

Note: one class = .2 of a full-time position.

Table 6. Instruction in English as a second language.

COURSE TITLE	LEVEL	NUMBER OF CLASSES	AVERAGE CLASS REGISTER	CLASS PERIODS PER WEEK
E.S.L.	1 & 2 (Beginners)	3	23.2	10
E.S.L.	3 (Intermediate)	3	31	10
E.S.L	5 & 6 (Advanced)	4	32.2	10
E.S.L	7 & 8 (Transitional)	5	34.1	5
Business English*	1 (Transitional)			

*Corresponds to E.S.L. 8, but stresses a business vocabulary

Table 7. Instruction in native language skills.

COURSE TITLE	NUMBER OF CLASSES	AVERAGE CLASS REGISTER	CLASS PERIODS PER WEEK
Spanish Language Arts	3	33.2	5
Commercial Spanish 2*	2	26.1	5
Commercial Spanish 4*	1	26	5
Spanish 8	2	34	5

*The commercial Spanish 2 - 4 sequence uses a two-year curriculum developed by the Basic Bilingual Program staff in earlier funding years.

Table 8. Bilingual content-area instruction.

COURSE TITLE	NUMBER OF CLASSES	AVERAGE CLASS REGISTER	CLASS PERIODS PER WEEK
Social Studies	6	32.4	5
Mathematics	5	31.2	5
Science	4	37	5
Stenography	2	25	5
Transcription	1	23	5
Typing	2	31	5

Table 9. Mainstream academic classes in which program students participate.

SUBJECT AREA	NUMBER OF STUDENTS
English (Non E.S.L.)	50
Social Studies	28
Mathematics	16
Science	7
Spanish	25

It is noteworthy that career preparation plays an important unifying role in the instructional design, even for the students who will opt for academic rather than business subjects in the 11th and 12th grades. For example, in the Spanish language skills component, business themes are used to teach language content, and communications, research, and library skills are stressed. Spanish language skills students also participated in the Bilingual Career Conference Day at Queensborough Community College this year, where they were able to meet with Hispanic representatives of various firms.

Another example of the way in which vocational themes serve as a focus for instruction is the use of curricular modules based on the industrial revolution in the social studies classes. These were developed last year in slow, advanced, and average versions, and used by three teachers for 33 students each. Although this grouping could not be done this year, the materials continue in use. Reading and writing skills are tapped, and the packet also serves as a focus for discussion

about problems related to vocationally based immigration, rural-urban migration and other topics of immediate personal concern to the program students.

Students who score above the twentieth percentile on the LAB examination and have a satisfactory academic record are encouraged to opt out of the program after consulting with parents, project staff, and the grade advisor. A formal checkpoint exists for this process: students who have been in the program for two full years are evaluated for potential mainstreaming based on LAB scores, English and Spanish reading scores, scholastic achievement, and attendance records. E.S.L. performance is given special emphasis in making this recommendation, and low Spanish performance would be another important factor. Students are also encouraged to take content-area courses outside the program according to their interests and abilities, and many take advantage of this partial mainstreaming option. (See Table 9.)

There are a number of students within the program who have completed the E.S.L. sequence and are taking mainstream English classes, yet continue to receive Spanish-language content-area instruction. In part, these may be students whose parents have not agreed to mainstreaming. According to the program director, most parents want their children to learn English, but do <u>not</u> want them mainstreamed. Parental consent is required to mainstream a student, and indeed a student must be mainstreamed if a parent requests this.

More significant is the number of students who have left the program academically, but retain a relationship to it in terms of supportive services and extracurricular activities. Such students

may come to the program office with various personal and academic problems. They are redirected appropriately, but the program does continue to function for them in an advocacy and facilitating role. Similarly, those who wish to continue to participate in extracurricular activities are encouraged to do so, although they are encouraged to take an active part in mainstream activities as well. Program publications are an especially popular area for continued participation by mainstreamed students. Also, program notices and publications continue to be sent to all mainstreamed program students to foster the programs' continued relationship with these "alumni" and "alumnae."

In general, not only parents but students as well may resist mainstreaming at Bowne. However, the program usually prevails when it believes mainstreaming is indicated by the student's record. It is also possible for the student to return to the program after mainstreaming, if parents and student desire this, although this option is rarely chosen. In this connection it is noteworthy that, according to the program director, an analysis was done and in nearly 100 percent of the cases the student achievement level went down immediately after mainstreaming. Unfortunately it has not been possible to collect data as to whether this pattern persists, which would be necessary in order to determine its cause. Such a follow-up study is recommended in order to help the Bowne administration in deciding what will replace the program, now in its last year of funding.

Students exit from the program for a variety of reasons other than mainstreaming, as shown in the following table.

Table 10. Number of students leaving the program.

REASON FOR LEAVING	GRADE 9	GRADE 10	GRADE 11	GRADE 12	GRADE UNKNOWN	TOTAL
Fully mainstreamed		1	3	4		8
Discharged/ transferred to altern. program	1	2	2		14	19
Transferred to another school	2	2	5	1	2	12
Returned to Native Country		4	2	1	5	12
Discharged (Marriage)	1				1	2
Discharged (Reason Unknown)		2		2	6	10
Truant		1			1	2
Dropout	1	4	2		6	13
TOTAL	5	16	14	8	35	78

Table 10 presents the data which were reported for students leaving the program during 1980-81, by grade (a breakdown of the information by sex was inconclusive due to the small numbers of students reported). The table indicates:

--The largest group of students leaving the program included those classified as truants, drop-outs, or those who left the program for some unknown reason -- a total of 25 in all.

--Eight students were mainstreamed. These tended to be eleventh and twelfth graders.

--A total of 31 students moved, or were discharged to an alternative program. Twelve additional students returned to their native country. Students moved away or transferred primarily in grades nine, ten, and eleven.

V. Non-Instructional Component

An overview of the non-instuctional component of Bowne's Basic Bilingual Program is given in Table 11 below.

Table 11. Funding of the non-instructional component.

	FUNDING SOURCES(S)	PERSONNEL
Administration & Supervision	75% Title VII 25% Tax Levy	1 Title VII Prog. Director
Curriculum Development	Title VII	.6 Title VII Assist. Prog. Director*
Supportive Services		
Staff Development		
Parental & Community Involvement		
Other	Title VII	1 Bilingual Secretary

*The assistant program director spends .4 of the time in teaching.

Note that although no personnel have been funded to perform supportive services, staff development, and parental and community involvement functions this year, these functions are actually a part of the program and have fallen mainly to the program director and the assistant director.

CURRICULUM DEVELOPMENT

Curriculum development has not been an important area during the 1980-81 school year, as it was in prior years. This is partially due to the normal shift of emphasis away from this area in the last year of program operation of a five-year program: the job has essentially been done. Only the curriculum for essentials of mathematics, started

in 1979-80, was completed this year. The fact of no funded personnel to cover the area of supportive services, staff development, and parental and community involvement has also meant that available personnel were required to function in these areas, thus making them less available for curriculum development. It is also the case that bilingual faculty have continued to develop teacher-made materials for classroom use as the need arose. This effort too has been somewhat hampered by the lack of educational assistants in the classrooms. Essentially, curricular materials and texts in use this year are the same as those used in 1979-80, except for some new texts introduced in Spanish language arts.

An attempt has been made this year to create a small resource center in the rather limited space available to the program for this purpose. Texts and library reference materials were ordered for the resource shelves, and it is hoped that a place can be set up in the school library for bilingual material after the present program ends, and that the school library will continue to add to this material.

SUPPORTIVE SERVICES

Supportive services have been a major program focus this year, and it is much to the program's credit that so much has been accomplished despite the lack of any personnel specifically funded to function in this area. For example, the program has no personnel to make home visits: these are supposed to be made by the school's single attendance officer, who is not bilingual. The need for bilingual family assistants was acknowledged by the acting principal last year, as documented in the Final Evaluation Report for 1979-80. This need still exists; the program director stated that such staff would be especially

helpful to program students and that the present staff are often "bombarded" with calls from distraught parents. Nevertheless, program staff have been able to follow up every student absence with a telephone call. (Attendance rates for the current year were reported to be 92 percent by the program director, especially good considering that students may have to travel long distances to reach Bowne.) In addition, strongly worded mailgrams are sent to the parents of truants who do not appear for a conference.

The program also must function without a guidance counselor. The one bilingual guidance counselor for the entire school is responsible for 500 students, and also serves as their grade advisor. The location of the program organizationally and physically within the domain of the assistant principal for guidance, however, has fostered close co-ordination between this bilingual guidance counselor and program staff in an effort to provide more than the minimal level of student support to be expected under such difficult circumstances.

In practice, program students usually come first to the program director with their problems. If the problem is severe, with the need for family involvement or community services, or if an alternative setting is a potential, the student is referred to the bilingual guidance counselor. However the program continues its support if there is a language problem, and may also suggest an appropriate resource for a particular student, or give other assistance. The program director and the guidance counselor have worked especially closely this year to gather and disseminate information about alternative settings, and to identify students for whom such settings would be appropriate.

About 45 students were directed to various alternative programs in 1980-81, mainly to bilingual Auxiliary Services programs in the city. All were able to come back to the program for counseling or advice as needed.

Career counseling has been integrated into the Spanish language arts through business curriculum in several ways. For example, a bilingual counselor for Aspira with expertise in health careers visited the program for one day a week throughout most of the year. He gave workshops, and also provided individual and small-group counseling. Using the school library for some privacy, he was also able to provide some personal counseling where career-related discussion developed in this direction.

Another bilingual counselor, from Queensborough Community College, worked with four classes of Spanish language arts students over a period of three months. She accompanied them to Bilingual Career Conference Day at Queensborough, where students participated in a variety of workshops and talked with Hispanic representatives from various firms. The counselor also administered pre- and post-tests on career awareness.

Additional supportive services were provided by a team of three social workers in private practice who gave workshops for parents and students. The focus was on identification of problems and stresses on young people. A letter was sent out to parents for prior approval in this case, and the social workers also contacted parents if the students wished this. According to the program director, there was a very positive student response to the workshops. He had no data regarding how many participants went for additional counseling.

STAFF DEVELOPMENT

Staff development activities during the 1980-81 school year included college and graduate level courses at Queens College and other institutions in bilingual education, education, guidance, and related areas; regular in-service training meetings and workshops; and occasional model classes with an emphasis on behavioral objectives taught by the program director. (Program staff were especially pleased that one of the educational assistants completed her studies for a B.A. degree in mathematics this year.) Attention was also given to informal "teacher stress assistance" sessions in an attempt to provide supportive services for staff as well as students. Finally, an ongoing informal effort was made to educate teachers outside of the program about its aims and goals.

One of the most salient characteristics of the program staff is continuity and stability. Social studies, biology, and science teachers, as well as most Spanish language arts teachers, have been with the program since its beginning. This is also true of the administrative staff, and as was pointed out above, the vice principal for guidance under whom the program is organized participated in writing the original proposal.

In general, the staff is well-qualified, as shown in Table 12, below. However, several teachers have been teaching out of license. The stenography and typing classes are taught bilingually by a teacher who has no bilingual license, but is Spanish speaking, according to the program director. In addition some spillover social studies classes were taught out of license, and during the fall semester a math essentials class was taught by a teacher not licensed in mathematics.

Table 12. Title VII staff characteristics.

PROFESSIONAL PERSONNEL	EDUCATION	CERTIFICATION	BILINGUAL EXPERIENCE
Project Director	M.A. Spanish Professional Diploma, Administration	Spanish D.H.S.	10 years
Assistant Director	M.A. Spanish	Spanish D.H.S. Biology and General Science (Anc.)	10 years
NON-PROFESSIONAL PERSONNEL	**EDUCATION**	**CERTIFICATION**	**BILINGUAL EXPERIENCE**
Educational Assistant	B.A. in Math A.S. in Bilingual Education		4
Educational Assistant	A.S. in Bilingual Education		4

PARENTAL AND COMMUNITY INVOLVEMENT

The Basic Bilingual Program at Bowne has been characterized by a strong effort to reach out to bilingual parents and achieve parental participation, despite the lack of a family assistant to make home visits. This effort has resulted in partial success although many community factors work against participation: long distance to travel, lack of money for transportation or appropriate clothing, one-parent or other non-traditional families, heavy or irregular work schedules, and the like. The program director expressed special concern for this component in the absence of Title VII funding next year.

At present, about eleven parents participate regularly in the Parent Advisory Committee's evening meetings, but these are intensely involved in its activities. A much larger number of parents participated in program and school-wide activities such as Open School Night, the Foods Festival, Bilingual Talent Night, a Jogathon, and the Bilingual Career College Day at Queensborough Community College. And a significant number of parents contacted the program by telephone for information or assistance.

Less tangible but very important is the trust that parents have in the program and its staff. One example is provided by an incident which occurred this year. A program student's parents had forced her older sister to marry at an early age. She felt that her parents would listen to the program staff's advice, and appealed to them for help. (It is also possible that parents who would initially resist any formal type of counseling, will accept help from the bilingual program staff.) So far, this girl has not had to take legal action against her parents, as she had feared she might.

Information about the program is disseminated to parents, and ultimately to the larger community in various ways. There are special orientation sessions for new parents at the I.S. level (feeder schools), and at a bilingual parents general meeting in the fall. A parents' newsletter, El Noticiero, is sent to the students' homes, school notices are translated into Spanish -- a cause of some dissention because of the total school population's multilingual character -- and the telephone serves as another vital communications link. Ultimately, parents and former parents as well as students, inform the business community and others about the program through word-of-mouth, but the program itself

has made no special effort in this direction this year. However, the program does attempt to foster parental involvement with the larger community by giving parents written information in Spanish, about various community services and facilities, especially those related to the education of their children. No adult education classes are offered by the program or by the school, but parents are directed to bilingual classes at nearby Flushing and Bryant High Schools.

AFFECTIVE DOMAIN

Affective domain indicators for students point to the success of the program in this area -- one which is given special emphasis by the program head. Program attendance patterns reflect the students' high morale: at 93 percent in the fall and 92 percent in the spring, they are estimated to be about 10 percent higher than those for the school in general.

There have been no problems with vandalism or substance abuse and only a few suspensions, mainly for fighting. It was noted that there are no gangs active among the students, but that grouping exists along nationality lines, especially among Dominicans and Colombians. Rivalries between these two groups -- a problem in earlier years -- no longer causes disruption, however. The fact that program staff have dealt effectively with this within the classroom setting and that this problem continues to be under control, is one measure of the program's success in the affective domain.

Program students, and mainstreamed students who are graduating this year, usually apply to college. Of the forty-six graduates this year who are still within the program, all but eight applied to college

and most were accepted, mainly at Queensborough Community College nearby. An achievers' bulletin board which helps to keep motivation high, notes that four program students this year have been elected to the Spanish honor society. Each year, one student from the program receives the Bilingual Award at graduation.

Participation in extracurricular activities is high, both for program activities and for mainstream activities, especially sports. This year program students are also involved in the school-wide Annual Sing, the school play, and in school government, with two students part of a special leadership class. In addition, the program's Student Advisory Council involves ten students, one from each homeroom. These students meet once a month, and once a week in September and February, to give student input on various dimensions of program activity.

In summary, despite the conflicting pressures of home responsibilities and after-school jobs which may keep some students occupied from 4 to 10 p.m. daily, most program students manage to: come to school regularly; achieve academically; and participate extracurricularly. In their crowded and often stressful lives, the program evidently functions as a source of emotional stability and growth as well as of academic training. Students are proud of the program and in all instances observed, including three classroom settings, they related easily and very positively to the program staff.

VI. FINDINGS

ASSESSMENT PROCEDURES, INSTRUMENTS, AND FINDINGS

The following section presents the assessment instruments and procedures, and the results of the testing to evaluate student achievement in 1980-1981.

Students were assessed in English language development, growth in their mastery of their native language, mathematics, social studies, and science. The following are the areas assessed and the instruments used:

English as a second language -- CREST (Criterion Referenced English Syntax Test, Levels I, II, III)

Reading in Spanish -- Interamerican Series, Prueba de Lectura (Total Reading, Forms AS and BS, intermediate and advanced levels, 1950 version)

Mathematics performance -- Teacher-made tests

Science performance -- Teacher-made tests

Social studies performance -- Teacher-made tests

Native language arts performance -- Teacher-made tests

Business education performance -- Teacher-made tests

Attendance -- School and program records

The following analyses were performed:

On pre/post standardized tests of native language achievement statistical and educational significance are reported:

Statistical significance was determined through the application of the correlated t-test model. This statistical analysis demonstrates whether the difference between pre-test and post-test mean scores is larger than would be expected by chance variation alone; i.e. is statistically significant.

This analysis does not represent an estimate of how students would have performed in the absence of the program. No such estimate could be made because of the inapplicability of test norms for this population, and the unavailability of an appropriate comparison group.

Educational significance was determined for each grade level by calculating an "effect size" based on observed summary statistics using the procedure recommended by Cohen.[1] An effect size for the correlated t-test model is an estimate of the difference between pre-test and post-test means expressed in standard deviation units freed of the influence of sample size. It became desirable to establish such an estimate because substantial differences that do exist frequently fail to reach statistical significance if the number of observations for each unit of statistical analysis is small. Similarly, statistically significant differences often are not educationally meaningful.

Thus, statistical and educational significance permit a more meaningful appraisal of project outcomes. As a rule of thumb, the following effect size indices are recommended by Cohen as guides to interpreting educational significance (ES):

a difference of 1/5 = .20 = small ES

a difference of 1/2 = .50 = medium ES

a difference of 4/5 = .80 = large ES

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[1] Jacob Cohen. Statistical Power Analysis for the Behavioral Sciences (Revised Edition). New York: Academic Press, 1977 Chapter 2.

The instrument used to measure growth in English language was the Criterion Referenced English Syntax Test (CREST), which tests mastery of specific syntactic skills at three levels. Material at the beginning and intermediate levels of the CREST is broken down into 25 objectives per level, such as present-tense forms of the verb "to be" (Level I), or possessive adjectives and pronouns (Level II). Material at the advanced level (Level III) is organized into 15 objectives, such as reflexive pronouns. At each level, students are asked to complete four items for each objective. An item consists of a sentence frame for which the student must supply a word or phrase chosen from four possibilities. Mastery of a skill objective is determined by a student's ability to answer at least three out of four items correctly.

This report provides information on the average number of objectives mastered, and the average number of objectives mastered per month of treatment by students who received non-Title I E.S.L. instruction for nine months. Information is also provided on students' performance at the various test levels.

Performance breakdowns are reported in two ways. First, a grade and level breakdown is reported for students who were pre- and post-tested with the same test level. In addition, a grade and test level breakdown is reported for students who were administered a higher level of the CREST when post-tested than when pre-tested. Second, results for the combined sample are reported for the average number of objectives mastered at pre- and post-testings, and the average number of objectives mastered per month of treatment. For students given different levels of the test at pre- and post-testing, it was assumed that all objectives of the pre-test level were mastered by the time of post-testing. If Levels

I and III were used, the additional assumption was made that all Level II objectives were also mastered.

The results of the criterion referenced tests in mathematics, social studies, science, native language arts, and business education are reported in terms of the number and percent of students achieving the criterion levels set for the participants (65 percent passing).

Information is provided on the attendance rate of students participating in the bilingual program compared with that of the total school population.

The following pages present student achievement in tabular form.

Table 13. Results of the Criterion Referenced English Syntax Test (CREST), average number of objectives mastered, and objectives mastered per month.

(E.S.L. non-Title I students, total year, total sample)

Grade	# of Students	Average # of Objectives Mastered at Pre-Test	Average # of Objectives Mastered at Post-Test	Total Objectives Mastered*	Average Months of Treatment	Objectives Mastered Per Month
9	34	11.1	18.1	7.0	8.4	.83
10	57	12.4	21.6	9.2	8.4	1.10
11	30	12.1	21.7	9.6	8.5	1.13
12	34	12.2	17.0	4.8	8.3	.58
Totals	155	12.2	20.3	8.1	8.4	.96

*Post-test score minus pre-test score.

- The total group of 155 students gained an average of 8.1 CREST objectives after one year of E.S.L. instruction.
- The total group mastered approximately one objective for each month of instruction.
- Grade 10 and 11 students gained more objectives for each month of instruction than students in grades 9 and 12.

Table 14. Performance of students on the Criterion Referenced English Syntax Test (CREST), average number of objectives mastered by grade and test level.

(E.S.L. non-Title I students, total year, students pre- and post-tested with same level)

	LEVEL I				LEVEL II				LEVEL III			
		Average Number of Objectives Mastered				Average Number of Objectives Mastered				Average Number of Objectives Mastered		
Grade	N	Pre	Post	Gain*	N	Pre	Post	Gain*	N	Pre	Post	Gain*
9	14	7.5	13.4	5.9	4	17.0	18.5	1.5	9	10.8	12.9	2.1
10	7	8.7	10.3	1.6	9	8.3	11.3	3.0	17	11.1	12.6	1.5
11	2	8.5	14.5	6.0	5	7.4	12.0	4.6	11	9.7	10.3	.6
12	1	13.0	21.0	7.0	1	14.0	9.0	-5.0	24	10.3	10.8	.5
TOTALS	24	8.2	12.9	4.7	19	10.2	12.9	2.7	61	10.5	11.5	1.0

NOTE: Maximum number of objectives for each level: Level I (25); Level II (25); Level III (15).

*Post-test score minus pre-test score.

- Two-thirds of the program students (104/155) received instruction on the same test level between pre- and post-testing.
- Lower grade students received instruction at lower test levels and upper grade students received instruction at upper test levels.
- Fewer gains were made by students on level III but students showed high levels of knowledge at pre-test.
- Recording errors are suspected for the 12th grade student tested on Level II.

Table 15. Performance of students tested on more than one test level on the Criterion Referenced English Syntax Test (CREST).

(E.S.L. non-Title I students)

	Students Advancing from Level I to Level II			Students Advancing from Level II to Level III			Students Advancing from Level I to Level III		
Grade	N	Average # Objectives Mastered (Pre-Test Level I)	Average Total Objectives Mastered	N	Average # Objectives Mastered (Pre-Test Level II)	Average Total Objectives Mastered	N	Average # Objectives Mastered (Pre-Test Level I)	Average Total Objectives Mastered
9	4	13.5	19.5	3	17.3	18.0			
10	10	10.8	21.5	13	19.4	15.6	1	21	41
11	4	13.3	22.3	7	21.0	16.8	1	19	41
12	1	23.0	26.0	7	16.0	17.8			
Totals	19	12.5	21.5	30	18.8	16.6	2	20.0	41.0

NOTE: Maximum number of objectives for each level: Level I (25); Level II (25); Level III (15).

- One-third of the program students (51/155) performed on one or more test level between pre- and post-testing.
- The typical student mastered 17 objectives at pre-test and mastered a total of 20 objectives between pre- and post-testing.
- Two students in grades 10 and 11 advanced two test levels. This is unusually large growth in English language acquisition.

Table 16. Native language reading achievement for Spanish-speaking students.

Significance of mean total raw score differences between initial and final test scores in native language reading achievement of students with full instructional treatment on the Prueba de Lectura (Total Reading, Forms BS and AS) by grade and test level.

			Pre-Test		Post-Test						
Grade	Level	N	Mean	Standard Deviation	Mean	Standard Deviation	Mean Difference	Corr. Pre/post	t	p	ES
9	IN	36	102.5	14.1	101.4	15.0	-1.1	.48	-.47	NS	--
10	IN	47	104.5	14.3	108.8	10.3	4.3	.45	2.23	.05	.32
	AD	2	Insufficient Data								
11	AD	44	77.3	11.6	80.4	13.3	3.0	.75	2.26	.05	.34
12	AD	34	77.6	13.2	83.1	14.8	5.5	.82	3.80	.001	.65

IN = Intermediate
AD = Advanced

- Ninth-grade students showed a decline in raw score of 1.1 point. This outcome was not statistically significant, and may be due to an intermediate-level test which was too easy (ceiling effect).

- Tenth- and eleventh-grade students showed gains which were statistically significant; however, these gains were of small educational significance.

- The outcomes suggest that the test administered to tenth-graders may also have been too easy.

- Twelfth-grade students demonstrated gains which were highly significant statistically. These gains were of medium-to-large educational significance.

Table 17. Number and percent of students passing teacher-made examinations in mathematics.

	FALL 1980			SPRING 1981		
Grade	N	Number Passing	Percent Passing	N	Number Passing	Percent Passing
9	47	34	72%	55	34	62%
10	78	50	64%	82	58	71%
11	46	32	70%	38	25	66%
12	38	31	82%	23	21	91%
TOTAL:	209	147	70%	198	138	70%

- The criterion of 65 percent of students passing was met or exceeded by the eleventh and twelfth graders in both fall and spring.
- Ninth graders in the fall and 10th graders in the spring met the criterion.
- Ninth graders in the spring and tenth graders in the fall came close to but did not meet the criterion.
- Twelfth-graders had the highest level of performance on teacher-made mathematics exams.

Table 18. Number and percent of students passing teacher-made examinations in science.

	FALL 1980			SPRING 1981		
Grade	N	Number Passing	Percent Passing	N	Number Passing	Percent Passing
9	45	29	64%	45	28	62%
10	65	53	82%	73	56	77%
11	22	20	91%	26	22	85%
12	10	8	80%	11	9	82%
TOTAL:	142	110	77%	155	115	74%

- The criterion of 65 percent of students passing was met and substantially surpassed by tenth, eleventh, and twelfth graders in both fall and spring.
- Ninth-grade students in both fall and spring failed to reach the criterion, although they achieved rates very close to the 65 percent level.
- Eleventh graders had the highest level of performance on teacher-made science examinations.

Table 19. Number and percent of students passing teacher-made examinations in social studies.

	FALL 1980			SPRING 1981		
Grade	N	Number Passing	Percent Passing	N	Number Passing	Percent Passing
9	8	3	38%	47	31	66%
10	75	54	72%	76	58	76%
11	48	41	85%	52	39	75%
12	40	34	85%	30	24	80%
TOTAL:	171	132	77%	205	152	74%

- The criterion of 65 percent of students passing was met and substantially surpassed by tenth, eleventh, and twelfth graders in both fall and spring.
- Ninth-grade students in the fall failed to reach the criterion level, but their small number makes the outcome for that term unreliable. They did meet the criterion in the spring.
- Twelfth-grade students had the highest level of performance on teacher-made examinations in social studies.

Table 20. Number and percent of students passing teacher-made examinations in native language studies.

	FALL 1980			SPRING 1981		
Grade	N	Number Passing	Percent Passing	N	Number Passing	Percent Passing
9	42	34	81%	52	40	77%
10	70	60	86%	76	59	78%
11	44	43	98%	46	36	78%
12	26	26	100%	29	23	79%
TOTAL:	182	163	90%	203	158	78%

- The criterion of 65 percent of students passing was met and substantially surpassed in all grades in both fall and spring.
- Twelfth graders had the highest level of performance on teacher-made examinations in native language studies.
- Passing rates decline from fall to spring at all grade levels; these differences were large only for eleventh and twelfth graders.

Table 21. Number and percent of students passing teacher-made examinations in business education.

	FALL 1980			SPRING 1981		
Grade	N	Number Passing	Percent Passing	N	Number Passing	Percent Passing
9	15	12	80%	25	20	80%
10	41	39	95%	52	44	85%
11	16	14	88%	21	20	95%
12	11	11	100%	15	14	93%
TOTAL:	83	76	92%	113	98	87%

- Approximately one-third of program students were reported to be enrolled in business education courses in the fall; half of all program students were reported to be enrolled in these courses in the spring.
- The criterion of 65 percent of students passing was met and substantially surpassed in all grades in both fall and spring.

Table 22. Significance of the difference between attendance percentages of program students and the attendance percentage of the school.

Average school-wide attendance percentage: 82.8%

Grade	N	Mean Percentage	Standard Deviation	Percentage Difference	t	p
9	47	92.4	10.2	9.6	6.38	.001
10	79	91.9	9.0	9.1	8.93	.001
11	49	93.8	4.0	11.0	19.05	.001
12	45	91.6	6.1	8.8	9.57	.001
TOTAL	220	92.4	7.9	9.6	17.98	.001

- The attendance rate for students in each grade, and for the total group of bilingual students, exceeded 90 percent.
- The difference between attendance by project students and by the student body as a whole is statistically significant.
- The ninth and tenth grades showed greater variation in attendance than the upper grades.
- Eleventh-grade students had the highest level of attendance during the school year.
- Outcomes suggest that students' level of motivation was high.

VII. CONCLUSIONS AND RECOMMENDATIONS

In the five years of its existence, the Basic Bilingual Program at Bowne has developed an instructional program which appears to be meeting the varied needs of its population quite well, despite very heavy demands on the versatility and energy of its staff. Notable strengths of the program are its imaginative use of available resources, well-developed curricular strategies and materials, successful use of career and vocational themes across all areas of program activity, mutually productive relationship with the Bowne guidance staff, and special sensitivity and competence in supportive services and affective domains. In this connection its concern for families as well as individual students has been outstanding: students are recognized to be people who must function well in a variety of settings in order to function well academically, and they are supported as such in a highly individualized way.

Since this is the last year of program operation, recommendations focus on providing continuity for the present program population after the program's end. Another area in need of attention is planning for the future of bilingual studies at Bowne in the absence of the co-ordinating efforts of the program staff. The following recommendations are addressed to those two areas of concern.

1) The experience and expertise of the present program's staff should be recognized as a major resource in planning any future course of action. The re-establishment of a bilingual program should be given serious consideration, along with other options.

2) There should be a follow-up study of program students to monitor their progress in the mainstream. Special problems can then be identified and addressed before they become critical. Also, data useful to future planning for this population could be gathered in this way. It should not be forgotten that before the bilingual program existed, failure rates and drop-out rates were very high for these students.

3) Space should be made available for the present bilingual resource library in the school library. This material should be kept together in one place for the use of students and faculty.

4) The special needs of program parents should be considered and the importance of their participation to the academic progress of their children recognized. At the very least, the absence of a bilingual program seems to make the designation of a bilingual family liaison person of high priority. This recommendation was also made by the program director.

5) Thoughtful attention should be given to the academic needs of the population which the program has served in developing plans for Bowne as an international school -- an endeavor which provides many exciting possibilities for academic innovation.